

# **WATER AND LAND RESOURCES DIVISION**

## **CAPITAL IMPROVEMENT PROGRAM**

### **A. Introduction to Program, Program Goals, and Key 2003-2008 Issues**

The Water and Land Resources (WLR) Division Strategic Plan provides guidance and an organizational structure for the division. This enables WLR to provide services that protect the quality of life and the health and safety of all citizens and that promote the conservation of land and water resources in King County. It provides a guiding vision for the division's work, clarifies its core businesses, and establishes an organizational structure that supports that core work.

The major goals of WLR's planning process are improving the number of "on-the-ground" projects and implementing a comprehensive capital program. The Water and Land Resources Capital Improvement Program includes constructed and acquired projects and programs. These projects originate in each of the four core business areas in WLR: flood hazard reduction, stormwater, land and water stewardship, and rural and resource lands protection services. WLR also implements capital projects and provides technical analyses for other DNR and County clients where that work is strategically aligned to accomplishment of WLR goals. For example, WLR performs stormwater and habitat related designs for many Roads CIP projects, applying hydrologic and ecological experience on the landscape adjacent to the road right-of-way. WLR support to other capital programs is not included in this 2003 Capital Improvement Program Budget submittal, since the cost of those projects are reflected in the CIP budgets of the lead project management agencies (e.g., KCDOT Roads Division, Wastewater Treatment Division, and Parks Division).

### **Flood Hazard Reduction Services**

The Flood Hazard Reduction Services core business goal is to minimize flood hazard and damage to public and private property on major rivers throughout King County, while protecting public health and safety. This is accomplished through flood hazard reduction projects and programs, regulation and policy development, flood warning and emergency response, and disaster assistance programs. King County's state-approved Flood Hazard Reduction Plan (FHRP), developed with citizen advisory input and adopted by the King County Council in 1993, establishes criteria for prioritization of capital needs as well as recommendations for flood hazard reduction policies and regulations. Many additional federal, state and local natural resource management policies and regulations, including the Endangered Species Act, guide King County's flood hazard reduction program's projects. The FHRP also includes a prioritized list of capital needs as of 1993 that has been updated and supplemented primarily in response to flood events in 1995 and 1996 and in combination with new approaches to flood hazard reduction.

The Flood Hazard Reduction Services Section's CIP also includes continued River Improvement Fund funding for King County's local sponsorship roles and responsibilities in cooperating with the U.S. Army Corps of Engineers on Section 205 projects in the Snoqualmie and North Bend communities as well as a new General Investigation to conduct feasibility studies in 2003 for future projects in the Puyallup-White River Basin. Additionally, a new capital improvement project is proposed in 2003 to evaluate the

relocation of King County's Flood Warning Center with King County's Emergency Operations Center in the Renton Highlands.

## **Stormwater Services**

The Stormwater Services core business is managing the quantity and quality of surface water runoff in natural and constructed drainage and conveyance systems. Stormwater Services responds to surface water management complaints and inquiries, develops and implements solutions to identified problems, develops stormwater regulations, inspects and maintains residential stormwater facilities, inspects privately maintained stormwater facilities, and manages the County's NPDES permit.

The Stormwater Services section provides solutions to identified surface water problems through engineering reviews, formal engineering studies, design and construction of small capital projects, technical assistance, referrals to other programs, and enforcement actions. Qualifying small capital projects are designed and constructed through the Neighborhood Drainage Assistance Program (NDAP) and the Drainage Facility Retrofit Program in both the SWM and RDP service areas. Other projects are handed off to the Capital Projects and Open Space Acquisition section in WLR for design and construction.

## **Land and Water Stewardship Services**

Land and Water Stewardship Services (LAWS) fosters the responsible use of land and water resources in King County by helping individuals, communities, businesses and governments learn about, care for, and restore private lands, watersheds and King County's natural resources. Stewardship enables the county and its residents and businesses to comply with state and federal mandates and protects the high quality of life and resource-based rural

economy at less cost to us all. Finally, LAWS directs the acquisition, enhancement, and restoration of County-owned ecological lands. The basic services provided by this program include regulatory development and compliance; customer and technical assistance; and open space, habitat, resource land preservation / enhancement.

Regulatory Development and Compliance: LAWS contributes to compliance with local, State and federal laws through the local hazardous waste management program, the noxious weeds program and implementation of non-point pollution source control programs for farms, lakes, wetlands and streams.

Customer and Technical Assistance: Through watershed stewardship activities, community outreach, and partnership grants, LAWS provides direct assistance to property owners, businesses and citizens regarding water resource protection (including groundwater).

Open Space, Habitat and Resource Land Preservation/Enhancement: LAWS preserves or enhances open space, habitat and resource lands through:

- the reconnaissance and identification of potential stormwater and habitat capital projects and open space or resource lands acquisitions,
- serving as property owner and community liaisons, and
- providing implementation support for capital projects.

## **Rural and Resource Lands Protection Services**

The Office of Rural and Resource Lands Protection Services programs supports the core business of rural and resource lands protection and stewardship. This core business includes, but is not

limited to, agriculture, livestock management, farmlands preservation, current use taxation programs (Public Benefit Rating System and timberlands), forestry, the noxious weeds program, and rural economic development. In addition, the Office also coordinates the management of the County's natural lands and encourages environmental stewardship. The office is responsible for the interdepartmental coordination of the agricultural program as well as other rural and resource based programs. The office coordinates budgets among DDES and the rural drainage programs.

Capital needs have emerged from this core business as WLR has assumed responsibility for managing natural lands. In addition, the farming community's desire to maintain agricultural ditches as a means of maximizing farm production despite a stringent ESA regulatory climate has identified another previously unmet capital need.

### **Division Goal - Integrated Capital Improvement Program**

One of the primary goals of the Water and Land Resources Division Strategic Planning process was to lay the foundation for a fully integrated WLR Capital Improvement Program across its four core businesses. The conceptual framework for this integrated program was introduced in the Division's Strategic Plan and is portrayed in Figure 1. It provides a snapshot of general project type, the multitude of likely capital funding sources, and how projects are identified and prioritized for each of our four core program areas.

This schematic culminates in a Division-wide Capital and Acquisition Plan, prioritized across program areas while taking into account fund source constraints and priorities. This plan has been designed to cover the five general categories of major maintenance, large CIP, small CIP, acquisitions, and "programmatic" (e.g., CIP monitoring) capital projects. Our 2003 Capital Improvement

Program request improves upon last year as the Division transitions to a comprehensive division-wide six-year capital list.

WLR's 2003 Capital Improvement Program was developed according to this construct from four core businesses needs. The process flow for capital projects starts with identifying, prioritizing, and obtaining funding, and ends with implementation. Where feasible and consistent with the objectives of an integrated capital program, project ranking and selection have been coordinated across core business lines.

Figure IV.10

**OVERVIEW OF INTEGRATED CAPITAL IMPROVEMENT PROGRAM: Water and Land Resources Division**

<b>Program Area</b>	<b>Flood Hazard Reduction Services</b>	<b>Storm Water Services</b>	<b>Land and Water Stewardship Services</b>	<b>Rural and Resource Lands Protection and Stewardship Services</b>
<b>Project Type</b>	Levee setbacks and major levee improvements Floodplain elevations and buyouts Facility Repair	Flow control and conveyance improvements Water quality facilities Habitat Improvements Facility Repair and Retrofit	Habitat protection and restoration Water quality protection and restoration Groundwater	Farmland preservation Forest protection Agricultural drainage Natural resource land restoration and preservation
<b>Funding</b>	River Improvement Fund FEMA disaster assistance Hazard Mitigation Grants US Army Corps of Engineers Green River Flood Control Zone District State Flood Control Grants Inter-County River Improvement Fund (typ. \$.7 to \$1.2 M per year)	Surface Water Management Fees (original and rural service areas) (typ. \$1.15 M to \$2.48 M per year)	Conservation Futures Real Estate Excise Tax County Bonds Salmon Recovery Funding Board US Army Corps of Engineers King Conservation District Other state and federal grants Wastewater Capital Fund Surface Water Management fees (typ. \$7.6 M to \$12.7 M per year)	Conservation Futures Real Estate Excise Tax County Bonds Forest Legacy (Federal) King Conservation District Other state and federal grants Surface Water Management fees (typ. \$2.8 M to \$5.8 M per year)
<b>Project Identification</b>	Flood Hazard Reduction Plan Green River Flood Control Zone District Post Flood Inspections Disaster Response Flood Disaster Priorities	Drainage complaint investigations and studies Rural Drainage Program CIP Reconnaissance Basin Plans Stormwater Compliance Plans	WRIA Plans Basin Plans Citizen Oversight Committee for Conservation Futures Ecosystem Restoration Studies (w/ US Army Corps)	WRIA Plans Basin Plans Boards and Commissions Citizen Oversight Committee for Conservation Futures
<b>Project Prioritization</b> <b>Annually:</b> <b>A.</b> Projects prioritized within each core business and funding source based on program-specific criteria (Council adopt criteria Fall 2001) <b>B.</b> Projects prioritized and scheduled across program areas through annual division-wide CIP ranking process. Process to take feasibility and staffing issues into account while respecting core and program area priorities and funding source constraints <b>C.</b> Projects rolled up into division-wide capital and acquisition Program. Annual Council review and adopt within budget process.				
<b>Project Implementation</b>	Projects will be implemented jointly by the core service providers and the Capital Projects and Open Space Acquisitions Sections.			

## **B. Project Prioritization Methodology**

Each of the four core businesses developed a prioritized list of capital needs and evaluated the projects as to cost and effectiveness, feasibility, urgency, and community benefit. A list of projects deemed "ready" to begin in 2003 was developed for each core business. "Readiness" was determined by an evaluation of likely permitting requirements, confidence in the cost estimate, and landowner willingness where necessary.

The CIP Task Force, with representatives from each core business, developed a 3-tiered ranking of projects. The first tier projects are clear core business priorities, which will be funded first from revenues known to be available. Based on projected revenue from our major funding sources (SWM and RDP fees and River Improvement Fund monies), projects across the four core businesses are compiled into a second tier. The second-tier review across core businesses focuses the discussion on a subset of projects close to the funding cutoff, encourages leveraging of additional resources, and selects the best projects from a Division-wide perspective. The third and lowest tier includes additional projects, and highlights additional monies available for existing projects, if any.

Every effort has been made to leverage our investments to generate multiple benefits and create continuous landscape corridors. For example, flood buyouts (acquisitions) which purchase property and remove structures in the floodplain have been strategically aligned to provide on-site habitat improvements resulting in improved riparian river corridors and limited neighborhood public access. An ESA Contingency large stormwater CIP project provides King County local match to leverage federal grants for large habitat protection acquisitions.

## **C. Growth Management and Comprehensive Plan Issues**

The projects included in the 2003 request address the Growth Management Act policy directives in accordance with the Adopted 2000 King County Comprehensive Plan. A number of policies refer to the capital program and capital projects generally, and a number of policies are specific to the work of WLR. Chapter 4, Environment, contains Policy E-126 which states that stormwater runoff shall be managed through a variety of methods to limit impacts to aquatic resources, protect and enhance the viability of agricultural lands, and promote groundwater recharge. Policy E-128 requires that river and stream channels, stream outlets, headwater areas, and riparian corridors be preserved, protected and enhanced for their hydraulic, hydrologic, ecological and aesthetic functions, including their functions in providing woody debris sources to salmonid-bearing streams. In addition, policy E-168 states that King County shall use measures such as regulations, incentives, capital projects and purchase, to designate and protect fish and wildlife habitat conservation areas. Chapter 7, Facilities, lists resources and services that the County must provide: regional parks, trails, and preserved open spaces; water resource management, surface water management and flood warning, protection and preservation of natural resources(Policy F-103).

## **D. Financial Planning and Policy Overview**

Multi-year financial plans showing all revenues and expenditures for the present year, the prior year actuals, and a two-year projection are maintained for each CIP fund. In addition, a six-year plan updated annually is prepared to describe and quantify the division's long term capital requirements in conformance with long-term comprehensive plans.

There are several funding sources for capital projects. Revenue for Flood Hazard Reduction-Services capital projects is from a transfer from the County River Improvement Fund (Fund 105), and Federal and State agencies. This revenue is budgeted in the Surface and Stormwater Construction Fund 318. Stormwater and Water Quality

Services capital projects are funded from the Surface Water Management fee that is collected on tax parcels in unincorporated King County, and Surface Water Management Bonds. These revenues are collected and budgeted for expenditure in Fund 3290. This fund has several sub-funds, which prevent co-mingling of funds from separate sources.

Land and Water Stewardship projects are funded from numerous County fund sources. This is due in part to the integration of

different business units into this section and the variety of capital projects and programs being funded. In addition to Fund 3290, the major County funds are the 1989 Open Space Bond Fund (3521) and Open Space Non-bond Fund (3522), three Agriculture Preservation funds (3840), the Working Forest Fund (3391), and the Conservation Futures Fund (3150). Several stewardship projects are also supported by the Surface Water Management Funds (3290).

<b>Table A: CIP Funds and Restrictions</b>		
<b>Fund No.</b>	<b>Fund Name</b>	<b>Fund Usage/Restrictions</b>
3150	Conservation Future Levy	King County Code Citizen Oversight Committee selects projects from list of applications meeting specific selection criteria for council approval, except for the \$500k plus 5% of total revenue council reserve which is at council discretion.
3180	River Improvement Fund	For projects to control waters subject to flooding conditions through the construction, operation and maintenance of dams and impounding basins and dikes, and the acquisition of property.
3292	Surface Water Management Original Service Area	Funds can be used only in the original SWM service area for projects that protect life and property from stormwater damage and that restore and protect aquatic habitat.
3292	Surface Water Management Rural (Extended) Service Area)	Funds can only be used in the Rural (extended) service area, new in 2000, for projects that provide protection from stormwater damage for life and property.
3292	Surface Water Management Bonds	Restricted to surface water management projects identified on various bond issues.
3391	Working Forestry ANRI Bond	Funds to be used for Forest preservation Any funds remaining must be spent on Forestry.
3401	1993 Park Land Acquisition Bond (REET)	Funds to be used for acquisition only of parks or open space lands.
3521	1989 Open Space Bond County	Funds can only be used for selected Open Space Bond projects; reallocations must meet Open Space Bond intent and Open Space criteria.
3522	Open Space Non-Bond Fund	Revenue from numerous sources such as REET, IAC and SRFB grants. Restrictions on usage depend upon revenue source, usually restricted to specific area or properties.
3840	Farmland Preservation Bond	For acquisition of Farmland Development rights within specific Agriculture Production Districts. Agriculture Committee must approve allocation and re-allocation.
3841	Agriculture ANRI Bond	For acquisition of Farmland Development rights within specific Agriculture Production Districts. Agriculture Committee must approve allocation and re-allocation.

#### **E. CIP Program Accomplishments and Completion Lists**

<b>Projects Completed in 2001</b>
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**Flood Hazard Reduction Services Projects:**

047101	Snoqualmie Corps 205 Flood Reduction Project
047104	North Bend Corps 205 Flood Reduction Project
	Home Buyouts and Land Acquisitions
047105	White River Opportunity Floodplain Acquisitions
A47105	Cedar River Floodplain Acquisition -3 Parcels/1 acre
047106	Home Elevations
047107	Mill Creek/Mullen Slough Basin Action Plan
089517	White-Swan Revetment Repair

**Stormwater Services Projects (including SHRP)**

0B1505	O' Grady Park Habitat
2F1626	White Center @ St Vincent's
2C1626	White Center @ 17 <sup>th</sup> Ave SW
0A1205	May Valley Flood Reduction (Pinkley Purchase & Floodplain Restoration)
0D1145	Cedar River Wetland 14 Phase 1
4Y1787	Garrison Creek Ravine Emergency Response
00F945	Rutherford Creek Fish Passage
0A1155	Taylor Creek/Maxwell Rd Channel Improvements Phase 2
0A1407	Skyway Drainage Improvements



0A1405	Skyway/West Hill Projects
0A1786	SWM Small CIP/Drainage & Habitat Improvement (DHI)
0A1799	Rural Small CIP/DHI
0A1785	SWM Neighborhood Drainage Assistance Program (NDAP)
0A1796	Rural NDAP: C&M projects
0F1095	SWM Small Habitat Restoration (SHRP)
0A1820	SWM Facility Retrofits
0A1808	Rural Facility Retrofits
0D1787	CIP Monitoring & Regulatory Compliance
0A1790	Native Plant Holding Facility: Support to 46 projects
0A1790	Washington Conservation Crew Program
0J1795	Drainage District 13 Culvert Replacement
86304F	Madsen Cr East Wetland Overflow (WTD funded)
86304F	Madsen Cr Bell Diversion Modification (WTD funded)

#### **Land and Water Stewardship Services Projects (not inc. SHRP)**

OA1475	Green River Ecosystem Restoration Study
OA1806	Rural Community Partnership Grants
OA1797	RDP Reconnaissance
Various	Acquisitions

#### **Rural and Resource Lands Protection Services Projects**

384101	Farmland Preservation Program
OC1795	Livestock Management Ordinance (LMO) Cost Share

OB1796     Agricultural Drainage Assistance Program (ADAP)

<b>Construction Projects Expected to Be Completed in 2002</b>
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**Flood Hazard Reduction Services Projects**

047105     Rivers Major Maintenance  
N47105     Sammamish Slump Bank Stabilization  
047101     Snoqualmie Corps 205 Flood Reduction Project  
047104     North Bend Corps 205 Flood Reduction Project  
L47105     Home Buyouts and Land Acquisitions  
047107     Mill Creek/Mullen Slough Basin Action Plan

**Stormwater Services Projects (inc. LAWS, SHRP)**

5L1786     Garrison Creek Trib Stabilization  
0A1155     Taylor Creek Channel – Rolph Bridge Replacement  
0B1205     May Valley Stream Restoration – LWD Placement  
2B1205     May Valley – 164<sup>th</sup> Ave SE Violation Abatement  
2F1205     May Valley Stream Obstruction Removal – McFarland  
0B1595     Ruddell Addition Drainage Improvements Phase 2  
0D1145     Cedar River Wetland 14 Restoration Phase 2  
0F1795     Tuck Creek Phase 2 – Poplar Farm Flood Bypass  
0B1795     Wilderness Rim Div 2 Pond Improvements  
0F1135     Lower Peterson Cr Restoration

0A1445	Atwood Bank Stabilization
0E1395	Lewis Cr Fish Passage Obstruction Removal
2B1646	Lake Hicks Discharge Improvement
2S1799	Carnation Wetland Emergency Response
0A1405	Skyway/West Hill Projects
0A1786	SWM Small CIP/DHI
0A1799	Rural Small CIP/DHI
0A1785	Urban NDAP: C&M projects
0A1796	Rural NDAP : C&M projects
0F1095	Urban SHRP
0A1798	Rural SHRP
0A1820	SWM Facility Retrofits
0A1808	Rural Facility Retrofits
0D1787	CIP Monitoring & Regulatory Compliance
0A1790	Native Plant Holding Facility: Support to 46 projects
0A1790	Washington Conservation Crew Program
0C1787	Cedar Hills Culvert Replacement (Funding shared w/SWD)
86313F	Madsen Creek R/D Pond (WTD Funding)
86316F	Madsen Creek Main Stem/NW Trib Stab'n (WTD Funding)

**Land and Water Stewardship Services Projects (not inc. SHRP)**

OM1787	Watershed Habitat Acquisition and Restoration
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OA1475	Green Duwamish Ecosystem Restoration Study
OA1821	Completion of feasibility analysis of restoration projects
OA1806	Rural Community Partnership Grants
OA1797	RDP Reconnaissance
Various	Acquisitions (40 projects)

#### **Rural and Resources Lands Protection Services Projects**

384101	Gwerder site in the Enumclaw Agriculture Production District
384101	South 277 <sup>th</sup> Farm (Nelson Bauer) property, Lower Green APR.
384101	Indochinese property transfer in Snoqualmie APR
OB1796	ADAP
OC1795	LMO Cost Share
Various	Natural Lands Management

### **Construction Projects Expected to be Completed in 2003**

#### **Flood Hazard Reduction Services Projects**

047101	Snoqualmie Corps 205 Flood Reduction Projects
047104	North Bend Corps 205 Flood Reduction Project
047105	Rivers Major Maintenance
047112	Home Buyouts and Land Acquisitions
011524	Puyallup-White River Basin
047107	Mill Creek/Mullen Slough Basin Action Plan

**Stormwater Services (inc. LAWS, SHRP)**

0A1061	Patterson Creek Trib 383
0B1395	Somerset Creek Drainage
0A1205	May Creek Obstruction Removal – Crane
2P1799	Herb Farm
0A1155	Taylor Creek Channel Relocation Phase 3
0D1645	N Fork Hamm Creek Bypass
0E1645	Hamm Creek Clover Leaf Water Quality Improvement
0E1395	Lewis Creek Sediment Control
0A1405	Skyway/West Hill Projects
0A1803	Rural Emergency/Rapid Response Program
0A1795	Urban Emergency/Opportunity Program
0A1785	Urban NDAP: C&M projects
0A1796	Rural NDAP: C&M projects
0A1799	Rural Small CIP/DHI
0A1786	SWM Small CIP/DH
0A1798	Rural SHRP
0A1786	Urban SHRP
0A1820	SWM Facility Retrofits (25 constructed)
0D1787	CIP Monitoring & Regulatory Compliance
0A1790	Native Plant Holding Facility
0A1790	Washington Conservation Crew Program
0A1767	Des Moines Creek Basin Plan Projects

**Land and Water Stewardship Services Projects (not inc. SHRP)**

OA1475    Green Duwamish Ecosystem Restoration Program  
OA1821    Watershed Habitat Project Feasibility Studies  
OM1787    ESA Contingency Fund  
Various    Acquisition Projects

**Rural and Resource Lands Protection Services Projects**

384101    Development rights on 100 acres in Upper Green APD.  
384101    Development rights on 100 acres in the Snoqualmie APD.  
OB1796    ADAP (6 dredging projects)  
OC1795    LMO Cost Share